

Application: 10/769,661
Amendment dated: 07/19/07
Reply to Office Action dated: 03/01/07

Amendments to the Claims:

Listing of Claims:

1. (currently amended) A sterically stabilized liposome carrier wherein the carrier contains phosphatidylcholine, phosphatidylglycerol and poly[[delete space]](ethylene glycol) [[for combination with]], the carrier encapsulating budesonide for aerosol administration, the carrier being compatible with a respiratory tract of a mammal and effective to extend the effective life of the budesonide in the respiratory tract by a time equal to at least twice the effective life of the budesonide alone.
2. The carrier of claim 1 wherein the time is equal to at least three times the effective life of the budesonide alone.
3. The carrier of claim 1 wherein the carrier contains [[phosphatidylglycerol]] phosphatidylcholine in an amount up to 99% of the total phosphatidylcholine and phosphatidylglycerol in the carrier.
4. (cancelled).
5. (cancelled)
6. (cancelled)
7. (cancelled)
8. (currently amended) The carrier of claim 1 wherein the poly[[delete space]](ethylene glycol) has a molecular weight from about 500 to about 5,000 daltons.
9. The carrier of claim 1 wherein poly(ethylene glycol) is attached to lipids such as cholesterol or phosphatidylethanolamine having acyl chains containing from about 8 to about 18 carbon atoms.
10. The carrier of claim 9 wherein the acyl chains contain from about 16 to about 18 carbon atoms.
11. The carrier of claim 9 wherein the acyl groups comprise at least one of distearoyl, stearoyl oleoyl, oleoyl stearoyl, stearoyl palmitoyl, dipalmitoyl, dioleoyl, palmitoyl oleoyl and dipalmitoleoyl.
12. (currently amended) The carrier of claim 1 wherein the carrier comprises at least one of poly[[delete space]](ethylene glycol)[[-]]conjugated lipids,

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phosphatidylinositol, dipalmitoylphosphatidylpolyglycerol, lipid conjugated polyoxyethylene, lipid conjugated polysorbate, or lipids conjugated to other hydrophilic steric coating molecules safe for in vivo use, the sterically stabilized liposome being effective to extend the effective lifetime of the budesonide in the respiratory tract of a mammal.

13. (currently amended) The carrier of claim 1 wherein the carrier contains phosphatidylcholine[[,]] and phosphatidylglycerol, poly[[delete space]](ethylene glycol)[[-]]distearylphosphatidyldiethanolamine, with or without cholesterol.

14. (cancelled)

15. (cancelled)

16. (original) The carrier of claim 1 wherein the carrier comprises egg-derived or soybean-derived phosphatidylcholine.

17. (currently amended) The carrier of claim 1 wherein the carrier comprises egg-derived or [[soybean derived]] soybean-derived phosphatidylglycerol.

18. (currently amended) A composition comprising a sterically stabilized liposome carrier wherein the carrier contains phosphatidylcholine, phosphatidylglycerol and poly[[delete space]](ethylene glycol) [[in combination with]] encapsulating budesonide, the composition being compatible with a respiratory tract of a mammal, aerosol administration and effective to extend the effective life of the budesonide in the respiratory tract by a time equal to at least twice the effective life of the budesonide alone.

19. The composition of claim 18 wherein the time is equal to at least three times the effective life of the budesonide alone.

20. (cancelled)

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (currently amended) The composition of claim 20 wherein the carrier further comprises poly[[delete space]](ethylene glycol).

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25. (currently amended) The composition of claim 24 wherein the poly[[delete space]](ethylene glycol) has a molecular weight from about 500 to about 5,000 Daltons.

26. The composition of claim 18 wherein at least one of phosphatidylcholine, phosphatidylglycerol or poly(ethylene glycol)-derivatized lipid have acyl chains containing from about 8 to about 18 carbon atoms.

27. The composition of claim 26 wherein the acyl groups comprise at least one of distearoyl, stearoyl oleoyl, oleoyl stearoyl, stearoyl palmitoyl, dipalmitoyl, dioleoyl, palmitoyl oleoyl and dipalmitoleoyl.

28. (cancelled)

29. (currently amended) The composition of claim 18 wherein the carrier comprises at least one of poly[[delete space]](ethylene glycol)[[-]]conjugated lipids, phosphatidylinositol, dipalmitoylphosphatidylpolyglycerol, lipid conjugated polyoxyethylene, lipid conjugated polysorbate, or lipids conjugated other hydrophilic steric coating molecules safe for in vivo use, the sterically stabilized liposome being effective to extend the effective lifetime of budesonide in the respiratory tract of a mammal.

30. (currently amended) The composition of claim 18 wherein the carrier contains phosphatidylcholine, phosphatidylglycerol, and poly([[delete space]](ethylene glycol)[[-]]) distearoylphosphatidyldiethanolamine.

31. (cancelled)

32. (cancelled)

33. (original) The composition of claim 18 wherein the carrier comprises egg-derived or soybean-derived phosphatidylcholine.

34. (original) The composition of claim 18 wherein the carrier comprises egg-derived or soybean-derived phosphatidylglycerol.

35. (currently amended) A method for treating the respiratory tract of a mammal by aerosol administration of an effective amount of a composition comprising a sterically stabilized liposome carrier wherein the carrier contains phosphatidylcholine, phosphatidylglycerol and poly(ethylene glycol) [[for combination with]] with the carrier encapsulating [[budesonide, and]] budesonide, the sterically stabilized liposome being

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compatible with the respiratory tract of a mammal and effective to extend the effective life of the budesonide in the respiratory tract by a time equal to at least twice the effective life of the budesonide alone.

36. (cancelled)

37. (cancelled)

38. (cancelled)

39. (cancelled)

40. (cancelled)

41. (cancelled)

42. (currently amended) The method of claim 35 wherein the poly[[delete space]](ethylene glycol) is attached to a lipid such as phosphatidylethanolamine and has acyl chains containing from about 8 to about 18 carbon atoms.

43. The method of claim 42 wherein the acyl chains contain from about 16 to about 18 carbon atoms.

44. The method of claim 42 wherein the acyl groups comprise at least one of distearoyl, stearoyl oleoyl, oleoyl stearoyl, stearoyl palmitoyl, dipalmitoyl, dioleoyl, palmitoyl oleoyl and dipalmitoleoyl.

45. (currently amended) The method of claim 35 wherein the carrier comprises at least one of poly[[delete space]](ethylene glycol)[[-]]conjugated lipids, phosphatidylinositol, dipalmitoylphosphatidylpolyglycerol, lipid conjugated polyoxyethylene, lipid conjugated polysorbate, or lipids conjugated other hydrophilic steric coating molecules safe for in vivo use, the sterically stabilized liposome being effective to extend the effective lifetime of a drug in the respiratory tract of a mammal.

46. (currently amended) The method of claim 35 wherein the carrier contains phosphatidylcholine, phosphatidylglycerol, and poly[[delete space]](ethylene glycol)[[-]]distearylphosphatidyl-diethanolamine, with or without cholesterol.

47. (cancelled)

48. (cancelled)

49. (currently amended) The method of claim 35 wherein the carrier contains egg-derived or [[soybean derived]] soybean-derived phosphatidylglycerol.

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50. (currently amended) The method of claim 35 wherein the carrier contains egg-derived or [[soybean derived]] soybean-derived phosphatidylglycerol.

51. (cancelled)

52. (cancelled)

53. (cancelled)